Interpreting variances and taking action

MODULE 3 | PART C.3 | STUDENT COMPANION

All the variances in one place

Variance (Blue Wren, September)	Amount	Who explains it
Sales volume	$18,000 U	Profit centre manager with sales manager
Selling price	$9,000 F	Sales manager
Material price	$940 F	Purchasing manager
Material efficiency	$1,200 U	Production manager
Labour rate	$1,710 U	Production manager
Labour efficiency	$3,150 F	Production manager
Variable overhead spending	$1,400 U	Shared
Variable overhead efficiency	$900 F	Shared
Fixed overhead spending	$1,000 U	Profit / investment centre manager
Production volume (capacity signal)	$4,000 U	Profit / investment centre manager

Reconciling budgeted and actual profit

From budgeted to actual profit	$
Static budget profit (300,000 - 120,000 - 40,000)	140,000
Sales volume	(18,000)
Selling price	9,000
Materials (940 F - 1,200 U)	(260)
Labour (1,710 U - 3,150 F)	1,440
Variable overhead (1,400 U - 900 F)	(500)
Fixed overhead spending	(1,000)
Actual profit (279,000 - 27,260 - 61,560 - 18,500 - 41,000)	130,680

The production volume variance stays outside this bridge: the static budget treats fixed overhead as a lump sum.

Variances tell connected stories

Price up, volume down
A $1 rise earned $9,000 but cost $18,000 of contribution

Cheap steel, more steel
Price saving $940; extra usage $1,200

Higher rate, fewer hours
Experienced crew: rate $1,710 U; efficiency $3,150 F

Hours drive overhead
Fewer labour hours made variable overhead efficiency favourable too

Favourable is not always good; unfavourable is not always bad

Usual suspects behind variances

Variance	Possible causes
Favourable price or spending	Talented staff on lower grades; skilful negotiation; market oversupply; bulk buying; cheaper supplier or substitute; early-payment discounts
Unfavourable price or spending	More experienced (higher-paid) staff; overtime premiums; pay rises after training or promotion; shortages pushing prices up
Favourable efficiency	Skilled workers; efficient scheduling; new scheduling software; better-quality materials
Unfavourable efficiency	Less skilled or substitute workers; poor scheduling; poorly maintained machines; breakdowns; poorer materials
Any variance	An incorrect budget - acceptable once, suspicious if repeated every year

Capacity questions (production volume variance): Why did we not produce at budget? Has demand fallen? Has quality slipped? Are prices too high, or are competitors cheaper or more aggressive? Have new rivals arrived? If demand rises beyond the relevant range for good, plan more capacity; if output keeps falling short, consider downsizing or fixing the strategy.

Actions Blue Wren might take

Finding	Action
Cheap steel increased scrap	Agree steel quality specifications jointly between purchasing and production
Price rise cut volume	Test customers' price sensitivity before the next change
Experienced crew paid off	Keep them; train others to their level
Overhead spending up	Review the electricity contract and insurance
Causes cross departments	Monthly variance forum with sales, purchasing and production

Practice questions

MODULE 3 | PART C.3 | TRY THESE BEFORE THE WORKED ANSWERS

Ridgeway Boards (imagined) - September. Static budget: make and sell 4,000 skateboards at $90. Standards per board: timber 2 kg at $5 per kg; labour 0.5 hours at $32 per hour; variable overhead $24 per machine hour, 0.25 machine hours per board; fixed overhead budget $40,000 a month, allocated on budgeted machine hours. Actual: 3,800 boards made and sold at $92; timber used 7,800 kg costing $4.80 per kg; labour 1,950 hours at $31 per hour; 920 machine hours; variable overhead $23,000; fixed overhead $41,500.

Question 1 - Reconcile budgeted and actual profit

Prepare Ridgeway's static budget profit and actual profit for September, then reconcile them using the sales, material, labour, variable overhead and fixed overhead spending variances.

Question 2 - Linked variances

Identify two pairs of Ridgeway's variances that may be linked and explain the likely connection.

Question 3 - Responsibility and bonuses

Which managers should explain each variance? Has anyone clearly earned a bonus?

Worked answers

MODULE 3 | PART C.3 | WORKED ANSWERS - ATTEMPT THE QUESTIONS FIRST

Question 1 - Reconcile budgeted and actual profit

Item	$
Static budget: sales 4,000 x $90	360,000
Less variable costs 4,000 x $32	(128,000)
Less fixed overhead	(40,000)
Static budget profit	192,000
Sales volume (200 x $58)	(11,600)
Selling price ($2 x 3,800)	7,600
Materials ($1,560 F - $1,000 U)	560
Labour ($1,950 F - $1,600 U)	350
Variable overhead ($920 U - $720 F)	(200)
Fixed overhead spending	(1,500)
Actual profit: 349,600 - 37,440 - 60,450 - 23,000 - 41,500	187,210

Total variance $4,790 U = $192,000 - $187,210. The production volume variance ($2,000 U) is a capacity signal outside the bridge.

Question 2 - Linked variances

Selling price F and sales volume U: the $2 price rise probably cost 200 boards of sales. **Timber price F and timber efficiency U:** cheaper timber may be poorer, causing more waste. **Labour rate F and labour efficiency U:** lower-paid, less experienced staff probably took longer. **Variable overhead efficiency F:** fewer machine hours than allowed.

Question 3 - Responsibility and bonuses

Sales manager: price and (with the profit centre manager) volume. Purchasing: timber price. Production: timber usage and both labour variances. Shared: variable overhead. Profit/investment centre manager: fixed overhead spending and production volume. No one has clearly earned a bonus on these figures alone: most favourable variances are offset by linked unfavourable ones. Hear each manager's explanation first.